



ALL YOU NEED TO KNOW ABOUT...

**Paper**  
**One**  
**Physical**  
**Geography**  
**Case Studies**

MISS MCGOWAN GEOG



# ALL YOU NEED TO KNOW ABOUT... *The Jurassic coast*



## Location



It is the coastline of southern England

It stretches 95 miles from Devon to Dorset

It became a world heritage site in 2001



## Landforms found along the coastline

**Erosional landforms** occur when the coastline is eroded by the water

For example: bays, caves, stacks and stumps and coves

**Depositional landforms** occur when the coastline had materials deposited by the water

For example: spits, bars and a tombolo

## Erosional landforms

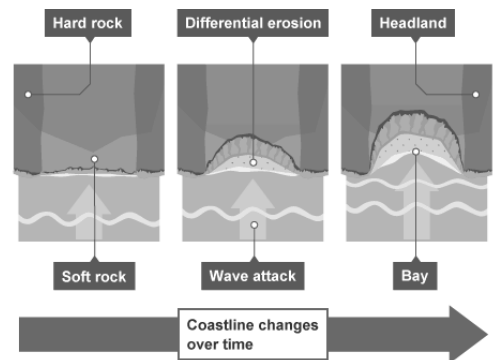
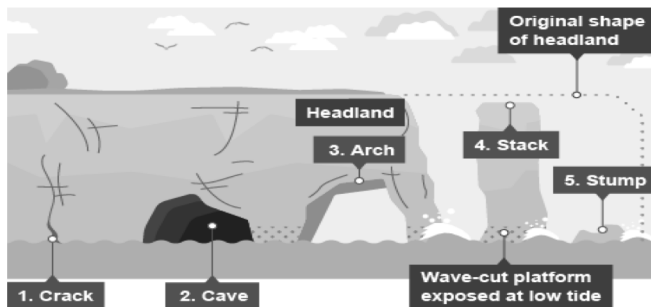


**Durdle Door** - an excellent example of a sea arch. Erosion by waves has opened up a crack in the outer wall of Portland Stone (limestone) headland, becoming a cave, and rapidly eroded the Purbeck Bed behind, developing into an arch.

**Lulworth Cove** - is a cove formed after a gap was eroded in a band of limestone. Behind the Portland Stone is a band of softer clay, eroded away to form the cove. The same process is occurring further west along the coastline, at Stair Hole.

**Bays** - 2 bays with beaches called Swanage & Studland Bay, both areas of softer rock (sandstone/clay). In between is headland called The Foreland formed of hard rock (chalk). Heathland behind Studland is a haven for many rare birds/ wildlife.

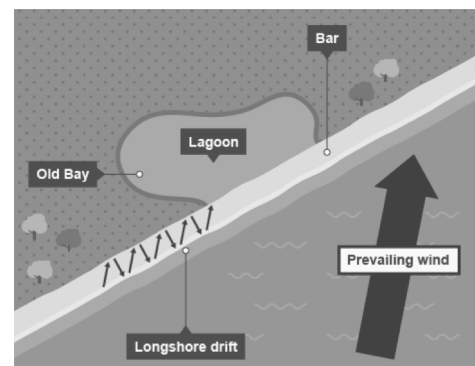
**Old Harry Rocks** - eastern end of Jurassic Coast towards Studland Bay, chalk headland of The Foreland has been dramatically eroded at the end into a stack (Old Harry) and a stump (Old Harry's Wife).



## Depositional landforms

**Chesil Beach** - stretches 18km, made of pebbles and shingle and Britain's longest tombolo. Tombolo is spit that connects mainland to an island (the Isle of Portland) by longshore drift.

Behind Chesil Beach is shallow lagoon - The Flea



# ALL YOU NEED TO KNOW ABOUT... *The River Tees*

## Location

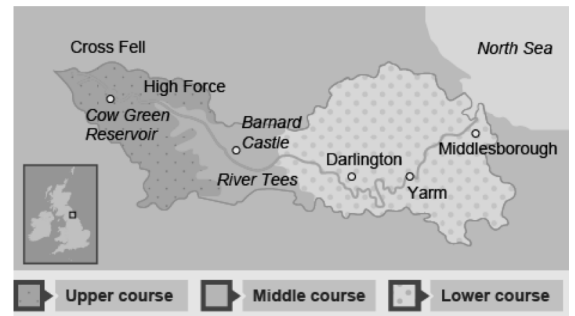
The River Tees is located in the North-East of England.

Its source is high in the Pennine Hills near cross fell (893m) From there it flows roughly east for around 128km to reach the North Sea at Middlesbrough.



## Source to mouth

The source of the River Tees is located in the Pennines and the river flows east to its mouth where it joins the North Sea

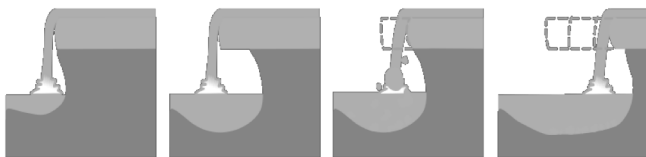


## The upper course

The upper course has hard impermeable rocks. Here, vertical erosion has formed a V-shaped valley

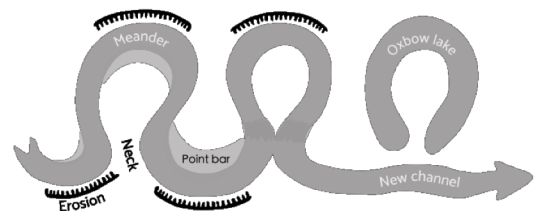


High Force, the UK's largest waterfall at 21 metres high, is located in the upper course. Here, a layer of hard resistant igneous rock called the Whin Sill (or Whinstone) lies over a layer of softer rocks (sandstones and slates) which erode more easily.



## The middle course

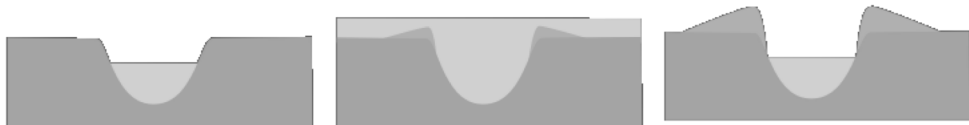
As the River Tees starts to erode sideways (lateral erosion), it forms meanders and ox-bow lakes. These can be identified in the middle course near Barnard Castle.



## The lower course

Near Yarm, the meanders in the lower course are much larger, and oxbow lakes have formed. In this area there are also levees which have formed when the river has flooded.

The River Tees has a very large estuary with mudflats and sandbanks which supports wildlife in the area. Sites such as Seal Sands are protected areas.



## Human uses

**Farming** - Sheep farming in the upper course.

**Tourism** - The Pennine Way, High Force waterfall



**Transport and settlement** - the Tees has been an important route way for centuries, and towns such as Yarm owe their existence to trading on the river.

# ALL YOU NEED TO KNOW ABOUT... **The Somerset floods 2014**

## Location

The Somerset levels are located in the South-West of England

Somerset Moors form an extensive area of low-lying farmland and wetlands bordered by the Bristol Channel



## Causes of the floods

Wettest January since records began – a succession of depressions (low pressure) driven across the Atlantic Ocean brought a period of wet weather lasting several weeks. 350mm of rain fell in January and February (about 100mm above the average)

High tides and storm surges swept water up the rivers from the Bristol channel

Rivers had not been dredged for at least 20 years.



## Social impacts

Over 600 houses flooded 16 farms evacuated

Residents evacuated to temporary accommodation

Villages such as Moorland cut off. This affected people's daily lives – for example attending school and power supplies cut off



## Economic impacts

Somerset County Council estimated the cost of flood damage to be more than £10 million

Over 14,000 ha of agricultural land under water for 3-4 weeks

Over 1000 livestock evacuated Local roads cut off by floods

## Environmental impacts

Floodwaters were heavily contaminated with sewage and other pollutants including oil and chemicals

A huge amount of debris had to be cleared

Stagnant water that had collected for months had to be reoxygenated before being pumped back into the rivers

## Immediate responses

Homeowners coped as best as they could Villagers cut off by the floods used boats to go shopping or attend school Local community groups and volunteers in Burrow bridge gave invaluable support

Many pumps were used to get water off the Levels and back into the rivers. These pumps were pumping 10 tonnes of water per second

## Long term responses

The Somerset Contingencies Partnership improved their website and set up a social media site to give people detailed and easy access to information on how to reduce their flood risk and prepare for a flood

By 2015, some of the temporary pumping stations such as those at Northmoor and the Bridgewater Taunton Canal were to be made permanent so they could be used again in times of flooding

Increasing the capacity of Sowby/King Sedgemoor drain. The Sowby channel was to be widened to increase its capacity

8km of the Rivers Tone and Parrett were dredged making both rivers deeper limiting the risk of damage by floods

# ALL YOU NEED TO KNOW ABOUT... **Lyme Regis**

## Location

Small coastal town in the South of England

In the heart of the heritage site known as the Jurassic Coast



## Issues in Lyme Regis

Much of the town has been built on unstable cliffs.

The coastline is eroding more rapidly than any in Europe due to the powerful waves from the south west.


Many properties have been destroyed or damaged, and there has been considerable erosion of the foreshore. The sea walls have been breached many times.

Lyme Regis is built on a layer of limestone, which is very solid on top of that layer are slippery muds, clays and sands, which slide over the limestone layer to form the landslides.



## Why the coastline needs to be managed

The local economy depends on tourism as a major source of income

 The local economy depends on tourism as a major source of income & jobs. 37,500 people are employed in the tourism sector in Dorset



The area generates £800million p/year most of that comes from overnight stays, buying food & drink and entertainment and shopping. In Lyme Regis there are many events such as: April's Fossil Festival, which showcases the Jurassic Coasts most famous rocks, May's Jazz & Blues Festival and August's Regatta,

## Management of the coastline at Lyme Regis



The Lyme Regis Environmental Improvement Scheme was set up in the early 1990s to provide long-term coastal protection and reduce the threat of landslips

Phase one → Phase two → Phase three → Phase four

New sea wall and promenade constructed to the east of the River Lim. In the winter of 2003 a £14 million emergency project was completed to stabilise the cliffs hundreds of large nails were used to hold rocks together.

Creation of a wide sand and shingle beach to absorb wave energy and increase us of the shore: shingle dredged from the English Channel and sand imported from France

Initial plan to prevent landslips and coastal erosion to the west of the Cobb were shelved. It was decided to leave this stretch of the coast alone as the costs outweighed the benefits.

The final phase focused on the coast east of the town. It cost £20 million and involved constructing a new 390m sea wall in front of the existing wall.

## Advantages of the management scheme

The new beaches have increased visitor numbers and sea front businesses are thriving



The new defences have stood up to recent stormy winters

The harbour is now better protected, benefiting boat owners and fishermen

## Disadvantages of the management scheme

Increased visitor numbers have led to conflicts with locals about traffic congestion and litter

Some people think the new defences have spoilt the natural coastal landscape

The new sea wall may interfere with coastal processes and affect neighbouring stretches of coastline



# ALL YOU NEED TO KNOW ABOUT... **The Beast from the East**

## Location

Effected mainly the East coast of the UK

Until storm Emma moved in from the South-East



## Causes

A change to the northern polar jet stream, which twisted its direction drawing in cold air to the UK from the east.

Cold air from thousands of miles away brought a severe chill

This air picked up moisture over the North Sea bringing SNOW

This affected mainly the East coast and dumped a huge amount of snow on the UK. Then on the 1st of March a depression called Storm Emma started to move in from the SE (from the Atlantic) across Cornwall causing even more snow as it hit the cold air sat over the UK. This caused the Met Office to issue Red weather warnings



## Primary effects

A man died in London after being pulled from a frozen lake, whilst there were 3 other reported deaths

Huge amounts of snow were dropped on the East coast of the UK and in the Scottish Borders

Up to 50cm (19 inches) of snow in parts of Dartmoor, Exmoor and uplands parts of south-east Wales accompanied by gales or severe gales in exposed areas.

Gusts of 60-70mph in parts of northern England and Wales.

Rural areas experienced temperature lows of -12°C

Snow drifts were as high as 7m in places

Many coastlines were also issued with flood warnings



## Secondary effects

British Airways cancelled hundreds of short-haul flights from Heathrow, and London City Airport also cancelled many services.

Hospitals in Glasgow, Grimsby, Scunthorpe and Gooke cancelled all outpatient appointments while Harrogate hospital asked staff who can walk to work to go in to cover shifts

Thousands of schools were closed

Scottish Premiership postponed its games

Police in Macclesfield said they arrested two suspected thieves after tracking their footprints through the snow

Hundreds of people were trapped in their vehicles for hours, on the A31 for example

There were many lorries that crashed or jack knifed

The weather cost the UK millions. The AA estimated that there were 8,260 collisions on Britain's roads from the snow chaos in just three days, with the insurance cost above £10m. Two thirds of them due to snow and ice.

Some supermarkets saw a rush of customers. There were reports of shelves being stripped of bread, milk and soup.

A baby was born on the A66 near Stockton-on-Tees after the parents failed to make it hospital as a result of the snow

There were multiple accidents on Britain's roads, including major incidents on the A1 in Northumberland

Major shopping centres and businesses closed early

There were worries the UK could run out of Gas



## Management and responses



Stranded drivers were given foil blankets

The Army were called in to help people when Storm Emma hit

Councils had to send out gritters and snow ploughs to clear the roads

Drivers of a Greggs Delivery van, stuck on the A1 near Newcastle, gave out free food to stranded drivers

The Met Office issued "red Warnings" for several areas, including the belt between Edinburgh and Glasgow

Public Health England (PHE) urged people to plan ahead to ensure they have enough food and medicine.

Rail passengers were warned to avoid travelling to or from Scotland on while in Kent 50 stations closed

Cleveland Mountain Rescue took district nurses around rural elderly patients in East Cleveland and North Yorkshire Moors. They also ran NHS staff into

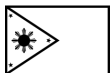
James Cook at Middlesbrough to keep services running

Army and Royal Air Force personnel were called in to ferry health workers through blocked roads in Lincolnshire and in Scotland. Ten RAF 4x4 vehicles with 20 airmen began transporting health staff from dawn in Lincolnshire after an urgent request from local police.



# ALL YOU NEED TO KNOW ABOUT... *Typhoon Haiyan*

## Location



The Philippines

Located in the South East Asia

Situated in the Western Pacific Ocean

Consists of around 7641 islands



## Key facts

8<sup>th</sup> November 2013

Winds 313km/h

2819mm rainfall

Waves of 7m in height



## Track



## Primary effects



Leyte and Tacloban experienced a 5-metre storm surge and 400mm of rainfall  
 flooded an area of up to 1km inland  
 90% of Tacloban was destroyed  
 6190 people died  
 4.1 million people made homeless  
 14.1 million people affected  
 Overall cost of damage was around \$12 billion  
 1.1 million tonnes of crops destroyed  
 1.1 million houses damaged  
 1 million farmers and 600,000 hectares of farmland affected

## Secondary effects



Survivors fought for food and supplies  
 Eight people died in a stampede for food supplies  
 People began to loot shops and warehouses  
 Fishing had to stop due to the waters being contaminated  
 800,000 litre oil leak damaged 10 hectares of mangrove forest  
 Rice prices rose by 12% due to lost harvests  
 3/4s of farmers lost their income  
 Tourism to the country also reduced

## Immediate responses



Authorities evacuated over 800,000 people  
 HMS illustrious assisted about 40,000 people – this was also able to process fresh water leading to a decrease in the number of waterborne illnesses  
 HMS illustrious also provided 14.2 tonnes of food  
 Save the children set up tent schools so education wasn't effected  
 Within three days the main airport opened and aid was able to enter the country  
 Over one million food packs and parcels and 250,000 litres of water were distributed in The Philippines within two weeks  
 33 countries and national organisations send help for the country  
 FIFG raised awareness and created a fundraising campaign to help  
 People took refuge in a stadium in Tacloban however had to be moved again due to flooding  
 The United Nations launched an international aid appeal in December 2013 for £480m to finance the humanitarian relief effort for 2014.

## Long term responses



A new storm surge warning system implemented.  
 The government worked towards rebuilding homes in 2014 with new upgraded features that should withstand future disasters – this campaign was known as the Build Back Better campaign.  
 The mangroves were replanted with the idea they will be able to absorb storm surges  
 Rice farming and fishing quickly re-established Coconut production - where trees take 5 years to bear fruit - will take longer.  
 Oxfam have given over 400 tonnes of rice seed to farmers to ensure they were able to get back into business  
 The government have set up a no-build zone on the Eastern coast to ensure the safety of locals  
 The UK government had pledged long term support to The Philippines to go beyond emergency aid to ensure that homes are rebuilt and to get locals back into jobs.  
 Grants were made for local fishermen so they could buy new boats and get their business back up and running  
 Cash for work schemes were also initiated to ensure cities and homes were rebuilt as quickly as possible

# ALL YOU NEED TO KNOW ABOUT... Epping Forest

## Location



Epping Forest is an ancient deciduous woodland that runs north-east of London on a high gravel ridge.

It covers an area of about 2,500 ha (hectares) and is about 19 km long and 4km wide. It is the largest area of public open space near London.



## Human uses for woodland

as a resource - wood is used for fuel (firewood) or as timber for buildings,  
for recreation - for example for walks  
for conservation to protect ecosystems



## Key facts

70% of Epping Forest is deciduous woodland (mostly beech).

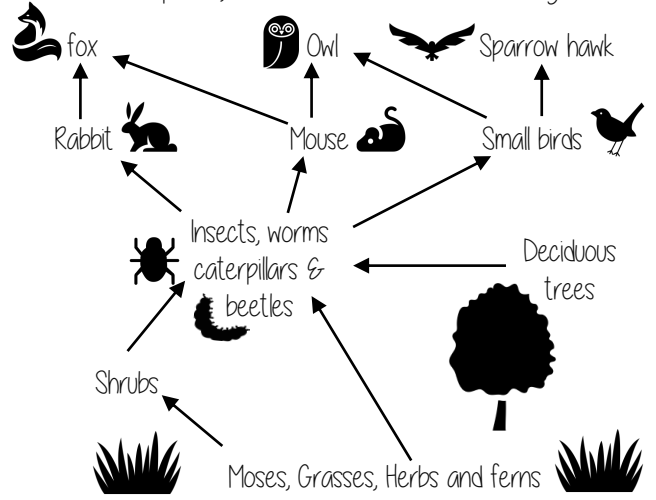
1,600ha of the forest has been designated a Site of Special Scientific Interest and a European Special Area of Conservation meaning it is protected



## Ecosystem

Epping Forest has a complex food web, composed of thousands of species, as the result of its careful management.

- A wide variety of native tree species that include beech, elm, oak and ash;
- A shrub layer consisting of hazel and holly, along with grasses, brambles, fern, bracken and flowering plants;
- 177 species of lichen and moss
- Many primary consumers including insects and small mammals and deer, along with 38 species of birds
- Secondary consumers such as owls, adders and foxes;
- 700 species of fungi, important decomposers, which are common due to a large amount of dead wood;
- Over 100 lakes and ponds providing important habitats for numerous species of fauna (animals) and flora (plants)



## Sustainable management



1878: The Epping Forest Act of Parliament was passed, stated that 'the Conservators shall at all times keep Epping Forest unenclosed and unbuilt on as an open space for the recreation and enjoyment of the people'. Has been managed by the City of London Corporation since.

### Tourist Management Strategies

- Providing car parks, toilets and refreshment facilities and maintaining footpaths, to manage recreation.
- Providing three easy-access car parks for people with disabilities.
- Preserving ancient earthworks and buildings.

### Other Sustainable Management Strategies

- Allowing old trees to die and collapse naturally (unless they're dangerous)
- Encouraging grazing (there's a herd of 50 cows) to maintain the grassland and its flora and fauna.
- Maintaining ponds to prevent them silting up.
- Preserving the herd of fallow deer.
- Dead wood is generally left when it falls in the forest, as it provides a valuable habitat.
- Some grassy areas are left uncut to encourage wildlife like butterflies.

## Sustainable definition

Meeting the needs of the future without compromising the needs of today.



## Pollarding

Involves cutting trees at about shoulder height, above the level of browsing by animals such as deer. They reshoot producing new wood for future cutting. This is why there are many ancient trees at Epping Forest, as it has been used there for years.

This helps trees live longer, because if a tree were not pollarded, its crown would become too heavy and the tree would topple over or split. It's a good example of sustainable management because it ensures a supply of wood for future generations.





# ALL YOU NEED TO KNOW ABOUT... **The Thar**

## Location



It stretches across north-west India and Pakistan

Covers an area of about 200,000 square km

Mostly in the Indian state of Rajasthan



## Climate and vegetation



Rainfall in the Thar Desert is low - typically between 120 and 240mm per year

Summer temperatures in July can reach 53°



The soils are generally sandy and not very fertile



Clumps of thorn forest vegetation

## Opportunities in the desert



Scientists at the Central Arid Zone Research Institute have developed a hardy breed of plum tree called the Ber tree. It produces large fruits and can survive in low rainfall conditions. The fruits can be sold and there is the potential to make a decent profit.

The main form of irrigation in the desert is the Indira Gandhi Canal. Constructed in 1958 and has a total length of 650km. Two of the main areas to benefit centred on the city of Jodhpur and Jaisalmer, where over 3,500km squared of land is under irrigation.

The desert region has valuable reserves of gypsum (used in making plaster for the construction industry and in making cement), feldspar (used to make ceramics) and kaolin (used as a whitener in paper).

A popular tourist destination. Desert safaris on camels, based at Jaisalmer, have become particularly popular. Local people benefit by acting as guides or rearing and looking after camels.

## Challenges in the desert



Thar desert is the most densely populated desert in the world, with a population density of 83 people per km squared, and the population is increasing. This is putting extra pressure on the fragile desert ecosystem.

Water management - excessive irrigation in some places has led to waterlogging of the ground. Where this has happened, salts poisonous to plants have been deposited on the ground surface.

Soil erosion - overcultivation and overgrazing have damaged the vegetation in places, leading to soil erosion by wind and rain. Once eroded away, the soil takes thousands of years to re-form.

Although tourists bring benefits such as employment and extra incomes, the environment that they enjoy is fragile and will suffer if tourism becomes overdeveloped.

## Sustainable management



In 1977 the government-funded Desert Development Programme was started. Its main aims are to restore the ecological balance of the region by conserving, developing and harnessing land, water, livestock and human resources. In Rajasthan it has been particularly concerned with developing forestry and addressing the issue of sand dune stabilisation.

The sand dunes in the Thar Desert are very mobile. In some areas they form a threat to farmland, roads and waterways. Various approaches have been adopted to stabilise the sand dunes, including planting blocks of trees and establishing shelterbelts of fences and trees alongside roads and canals.

# ALL YOU NEED TO KNOW ABOUT... The Amazon

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## Location



It sits within the Amazon River basin

It covers 40% of the South American Continent

It is in 8 countries including Brazil, Bolivia, Peru, Ecuador, Colombia,

Nearly 2/3rds is found in Brazil



## Key facts

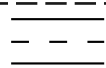
The Amazon is the world's biggest rainforest

The Amazon is thought to have 2.5 million species of insects

More than half the species in the Amazon rainforest are thought to live in the canopy

70 percent of South America's GDP is produced in areas that receive rainfall or water from the Amazon

## Causes of deforestation



**Subsistence and commercial farming:** - Farmers stay on the same land and attempt to farm for years. Nutrients in the soil quickly run out. It becomes infertile and nothing will grow. 70% of deforestation in the Amazon was caused by commercial farming between 2000 & 2005.

**Logging:** - 2-3% of deforestation was caused by logging between 2000 and 2005.

**Road Building:** The Trans-Amazonian Highway was built in 1972 and is 5,000 km long. This destroyed a massive amount of rainforest.

**Research has shown that 95% of deforestation occurs within 7km of a road.**

**Mineral extraction:** The mining of iron ore, bauxite, gold, oil and other minerals have benefited Brazil, however, it has also devastated large areas of the Amazon Rainforest.

**Energy development:** An unlimited supply of water and ideal river conditions have led to the development of hydro-electric power stations (HEP Stations).

**Population growth and Settlement:** Transmigration from urban to rural areas has been encouraged by the government. This means that more areas have had to be developed as settlements.

## Impacts of deforestation



With no trees to hold the soil together, heavy rain falls washes away the soil. As the tree canopy has gone, more water reaches the forest floor and washes away the nutrients in the soil.

Brazil is losing 55 million tonnes of top soil a year due to soil erosion caused by soy farming.

The Amazon stores around 100 billion tonnes of carbon. As trees are cut down, this carbon is released into the atmosphere as carbon dioxide and contributes to global warming.

When vegetation is burnt to clear forest areas, this produces even more carbon dioxide into the atmosphere.

Deforestation has brought a lot of wealth to countries that are poor meaning that they can become more developed and improve their infrastructure.

## Animal Adaptations



**The sloth** - uses camouflage and moves very slowly to make it difficult for predators to spot.

**The spider monkey** - has long, strong limbs to help it to climb through the rainforest trees.

**The flying frog** - has fully webbed hands and feet, and a flap of loose skin that stretches between its limbs, which allows it to glide from plant to plant.

**The toucan** - has a long, large bill to allow it to reach and cut fruit from branches that are too weak to support its weight.

## Plant Adaptations



**Lianas** - these are woody vines that have roots in the ground but climb up the trees to reach the sunlight. Their leaves and flowers grow in the canopy.

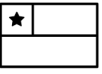
**Tree trunks** - The bark on these trees is smooth to allow water to flow down to the roots easily.


**Drip tips** - plants have leaves with pointy tips. This allows water to run off the leaves quickly without damaging or breaking them.

**Buttress roots** - large roots have ridges which create a large surface area that help to support large trees.

# ALL YOU NEED TO KNOW ABOUT... Chile 2010

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Location  Chile is on the West Coast of South America





The earthquake's epicentre was located 200 miles south-west of the Capital city – Santiago

It happened because the Nazca Plate subducted underneath the South American Plate.

Key facts

Sunday the 27<sup>th</sup> February 2010


03:34am 







 8.8 magnitude

22 miles below the Pacific ocean

Type of plate margin

At a **subduction** plate margin the oceanic crust subducts under the continental crust. This is a type of destructive plate margin



Primary effects      

Effected 6 regions of the country which holds 80% of the country's population, therefore its destruction effected mainly urban areas

Although the hospitals in Santiago received little to no damage the south of the country saw 6 hospitals collapse and 2 severely damaged

Roads were blocked by debris, bridges collapsed and there were reports of lorries falling into gaps created in the ground

Communication lines, electricity and water pipes had been cut off, more than 15 million left without water or electricity

The death toll reached just over 800, however no specific number has been given, with the worst hit area being just south of Santiago where 541 people were killed

Secondary effects      

The cost of rebuilding Chile is estimated to take up to 20% of the country's GDP luckily, they could afford this

The tourism industry was hit hard after many hostels, hotels and restaurants received cancellations soon after the earthquake, the US government warned people to avoid non-essential travel to the South American country. Many holidays were then cancelled

There was also hundreds of millions of dollars lost in the Chilean wine industry, one of the top ten wine distributors in the world

The earthquake generated a tsunami located 400 miles off the south coast of Chile. Chile was the only country effected when 9-foot waves hit the Chilean coast

Immediate responses  

The government were very quick to respond and started the clear up and search for people very quickly

Emergency hospitals were quickly set up and the WHO appealed to other countries to donate equipment

Emergency services found it difficult to access remote areas due to damage to infrastructure

Using the army the Chile government were able to bring 12000 tons of relief to citizens within 10 days

Oid ships were sent inside Chile within 24 hours these were mainly from the US

The north-south highway was restored the next day using metal plates making the worst hit areas more accessible for aid

The quake led to looting in some areas – leading to some shops and businesses taking longer to get back up and running and meant lost profits for the country

A state of emergency was declared by the Chilean president

Long term responses  

10 days after the quake more than 90% of the homes in the disaster area have regular power and water

Many buildings had been built to withstand a magnitude 9 earthquakes these still stood strong and were largely intact

The reconstruction is estimated to cost the global insurance industry \$7 billion

Chile is well positioned for the long-term recovery it faces unlike the situation in countries such as Nepal

Chiles economy is one of the most diverse in the region and therefore has not been effected by the loss of a main industry,

High rates of insurance in Chile means reconstruction can take place

The government set up a four-year recovery plan to ensure all quality of life was equal for all citizens this was focused mainly on rebuilding 200,000 homes.

Due to its strong economy Chile did not rely heavily on foreign aid from governments and NGOs

# ALL YOU NEED TO KNOW ABOUT... **Nepal** 2015

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**Location**  Nepal is located in the continent of Asia

The earthquake's epicentre was located 37 miles North-West of the Capital city – Kathmandu



It happened because the Indian Plate collided with the Eurasian Plate.

## Key facts

Saturday the 25<sup>th</sup> April 2015



11:26am

7.6 magnitude

## Type of plate margin

At a **collision** plate margin two continental crusts move towards one another. This is a type of destructive plate margin



## Primary effects



8841 people died and 6800 people were injured  
1 million people were made homeless  
26 hospitals were destroyed  
50% of schools were destroyed  
\$10 dollars worth of damage

## Secondary effects



It triggered an avalanche on Mount Everest that swept through the Everest base camp.

19 people were killed - 7 were tourists the rest were native Sherpas

Landslides occurred in the Langtang valley

Landslide blocked Kail Gandaki River increasing flood risk



## Immediate responses



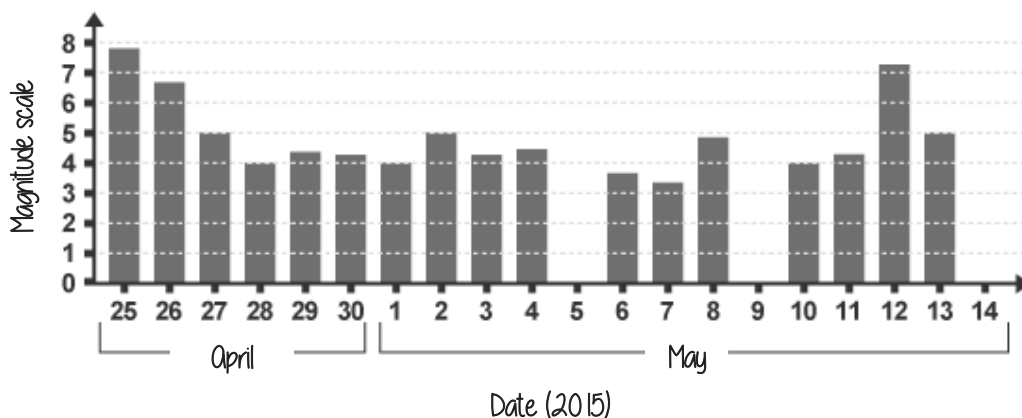
International aid was provided by India and China who in total committed over \$1 billion to help support Nepal  
The UK offered help and support. Over 100 search and rescue responders, medical experts, and disaster and rescue experts were sent together with three Chinook helicopters for use by the Nepali government.  
The GIS tool "Crisis mapping" was used to coordinate the response.  
Aid workers from charities such as the Red Cross came to help.  
Temporary housing was provided, including 'Tent city' in Kathmandu.

## Long term responses



A new government taskforce was created to help deal with future earthquakes.  
Areas were zoned to assess damage.  
People are now being educated across Nepal to do earthquake drills.  
The Government of Nepal is trying hard to reduce poverty so that people can build homes and structures which could withstand earthquakes.  
The Asian Development Bank provided a \$3 million grant to Nepal for immediate relief efforts, and up to \$200 million for the first phase of rehabilitation.

The largest recorded earthquakes in Nepal Each Day



Data excludes earthquakes with a magnitude lower than 2.5

## Aftershocks from the Earthquake

Almost every day for the three weeks that followed, aftershocks were reported across the region.

Almost one in three were a magnitude of five or higher.

